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Slideshow
FULL DETAILS AND TRANSCRIPT

Quick Quizzes as Learning Tools
Kettle Moraine High School, Wisconsin • March 2008

Topic: How to Organize Your Teaching
Practice: Spacing Learning Over Time

Highlights

- Quizzes can be short, quick activities that provide immediate feedback to teachers and students about concepts that need more instruction or study.
- By organizing quiz results by review topics, teachers can provide students with a useful tool for recognizing areas of strength and weakness.

About the Site

Kettle Moraine High School
Wales, WI

Demographics
96% Caucasian
2% Hispanic
1% African American
1% Asian

10% Special Education/Disabled

4% Eligible for Subsidized Lunch

99.6% English Proficient

Mathematics teachers at Kettle Moraine High School adopted a new curriculum in 2004 to promote student mastery of concepts over time and to target support for students who typically struggle with traditional algebra and geometry programs. Distinctive features of the department's new approach to mathematics include:

- requiring students to explain their thinking and process for solving problems, both orally and in writing,
- use of manipulatives, visuals, and real-life scenarios to make abstract mathematical concepts more concrete,
- alternating worked problems with student practice when introducing new material,
- use of daily quizzes to review topics introduced days or weeks earlier,
- homework sets and tests designed to include at least 50% review topics,
- spiraling curriculum where new units build on concepts from previous units, and even previous courses, and
- Math Lab staffed by teachers throughout the day to support struggling students and strategic review of material.

Full Transcript

Presentation Title: Quick Quizzes as Learning Tools

Kettle Moraine High School, Wales, Wisconsin

By implementing a regular quizzing routine, math teachers at Kettle Moraine High School have been able to help students retain important concepts over time.

Slide #1: Quick and Easy

Each math teacher at Kettle Moraine uses some variation of a one- or two-question quiz that takes fewer than 10 minutes to administer and debrief. Mr. Willems posts questions on the board, eliminating the need for materials preparation.

Slide #2: Frequent Recall

In these closed-book quizzes, students are required to answer questions on topics they studied a few days or weeks earlier. The act of recalling this information helps to cement it in memory, reducing the likelihood that students will forget the material. The frequent quizzing has significantly reduced the amount of time Kettle Moraine students spend "cramming" for the final exam at the end of the year.

Slide #3: Immediate Feedback

Providing correct answer feedback immediately after the quiz raises students' awareness of any missteps and misconceptions. Mr. Comiskey posts an answer key on a clipboard where students can view the correct solution before turning in their own quizzes.

Other teachers may ask a student to solve the quiz problem in front of the class, or they may review the correct procedures themselves.

Slide #4: Correcting Errors

Whether or not the teacher decides to grade and record these assessments, these quick quizzes focus on learning and not evaluation. Mr. Forbes scores the quizzes, but requires students to correct and take notes on any incorrect answers as he reviews the quiz the next day.

Quizzes become opportunities for revealing student misunderstandings, and in the process of reviewing, teachers may find that some key concepts need to be re-taught or approached in a different way.

Slide #5: Encouraging Strategic Study

Mr. Forbes uses an online grading system to help students track their performance on the daily quizzes over the course of the school year. His system organizes the quiz scores by review topic (e.g., logarithms, simplifying equations, etc.) so that students can see their progress, and where they need improvement. Using this data, he conferences with students and recommends interventions—such as math labs, tutoring, or additional coursework—when he notices weak areas.